# Eulerian Ice Motion from Envisat

## Description - Eulerian Ice Motion Product

This product contains the results of ice motion derived from a pair of image frames.
The ice motion data are output in HDF format.

## Eulerian Ice Motion: Metadata Record

| Field Name | Description |
|---|---|
| *PID* | Envisat product identifier,<br>(S)yymmddhhmnsc_(T)yymmddhhmnsc_EP.hdf where<br>(S)yymmddhhmnsc: image A start time, year,month,day, hour,minute and second.<br>(T)yymmddhhmnsc: image B start time, year,month,day, hour,minute and second. |
| *PROD_DESCRIPTION* | Eulerian Ice Motion. |
| *DATA_REGION* | Region of the ice motion data, e.g. Central Arctic, Ross. |
| *SW_VERSION* | S/W version used to create this product. |
| *CREATE_YEAR*<br>*CREATE_TIME* | The year/time this product was created. |
| *TRACKING_REQ_ID* | Request ID of ice motion tracking. |
| *APID* | Image A product identifier. |
| *BPID* | Image B product identifier. |
| *ACENTYEAR*<br>*ACENTTIME* | Scene center year/time of image A. |
| *A_TL_LAT, A_TL_LON*<br>*A_TR_LAT, A_TR_LON*<br>*A_BR_LAT, A_BR_LON*<br>*A_BL_LAT, A_BL_LON* | The corner point locations of image A (deg). |
| *BCENTYEAR*<br>*BCENTTIME* | Scene center year/time of image B. |
| *B_TL_LAT, B_TL_LON*<br>*B_TR_LAT, B_TR_LON*<br>*B_BR_LAT, B_BR_LON*<br>*B_BL_LAT, B_BL_LON* | The corner point locations of image B (deg). |
| *D_TIME* | Time separation between images (day). |
| *GRID_W_OBS* | Number of grid elements with observations. |
| *PIXEL_SP* | Image pixel spacing (m). |
| *GRIDSPACE* | Grid element spacing (km). |
| *AVG_DISP_X,*<br>*AVG_DISP_Y* | Average displacement in x and y (km). |

**Eulerian Ice motion: Motion Data**

| Field | Description |
|---|---|
| *A_GRID_LAT,*<br>*A_GRID_LON* | Grid point location on image A (deg). |
| *B_GRID_LAT,*<br>*B_GRID_LON* | Grid point location on image B( deg). |
| *DISP_X,*<br>*DISP_Y* | Displacement of grid point (km). |
| *Q_FLAG* | Quality flag. |

**Qflag Codes**

The sequence of modifications to the location of a gridpoint during an inspection session are recorded in the *Qflag* codes:

(Notes: During an inspection session, the operator has the option to define an area to send to ice motion tracking procedure (sub-tracker) for refinement of the grid point positions.)

| Code | Description |
|---|---|
| 1 : | Unchanged with initial tracker quality 1 [tq1] – good quality |
| 2 : | Unchanged with initial tracker quality 2 [tq2] |
| 3 : | Unchanged with initial tracker quality 3 [tq3] |
| 4 : | Unchanged with initial tracker quality 4 [tq4] |
| 5 : | Unchanged with initial tracker quality 5 [tq5] |
| 6 : | Unchanged with initial tracker quality 6 [tq6] – acceptable quality |
| 101-106 : | Manipulated by operator manually or using a subtracker (100 is added to the code produced by the automatic tracker). |